

Name _____

Determining Number of Protons, Neutrons, and Electrons

Use your Periodic Table and the procedure we discussed in class to answer the questions below.

A. Write the atomic number, atomic mass, and mass number for each of the following elements. Then determine how many protons, neutrons, and electrons are in an atom of each of the elements below. There are more on the back.

1. Neon (Ne)

Atomic # _____
Atomic mass _____
Mass # _____

of protons _____
of neutrons _____
of electrons _____

2. Silicon (Si)

Atomic # _____
Atomic mass _____
Mass # _____

of protons _____
of neutrons _____
of electrons _____

3. Hydrogen (H)

Atomic # _____
Atomic mass _____
Mass # _____

of protons _____
of neutrons _____
of electrons _____

4. Aluminum (Al)

Atomic # _____
Atomic mass _____
Mass # _____

of protons _____
of neutrons _____
of electrons _____

5. Potassium (K)

Atomic # _____
Atomic mass _____
Mass # _____

of protons _____
of neutrons _____
of electrons _____

6. Calcium (Ca)

Atomic # _____
Atomic mass _____
Mass # _____

of protons _____
of neutrons _____
of electrons _____

7. Nitrogen (N)

Atomic # _____

Atomic mass _____

Mass # _____

of protons _____

of neutrons _____

of electrons _____

8. Carbon (C)

Atomic # _____

Atomic mass _____

Mass # _____

of protons _____

of neutrons _____

of electrons _____

9. Argon (Ar)

Atomic # _____

Atomic mass _____

Mass # _____

of protons _____

of neutrons _____

of electrons _____

10. Iron (Fe)

Atomic # _____

Atomic mass _____

Mass # _____

of protons _____

of neutrons _____

of electrons _____

B. Determine the identity of the elements below based on the number of protons, neutrons, and electrons. Then, calculate the MASS NUMBER.

11. Which element has 3 protons, 4 neutrons, and 3 electrons?

Element _____ Mass Number _____

12. Which element has 12 protons, 12 neutrons, and 12 electrons?

Element _____ Mass Number _____

13. Which element has 15 protons, 16 neutrons, and 15 electrons?

Element _____ Mass Number _____

14. Which element has 35 protons, 45 neutrons, and 35 electrons?

Element _____ Mass Number _____

15. Which element has 29 protons, 35 neutrons, and 29 electrons?

Element _____ Mass Number _____

16. Which element has 36 protons, 48 neutrons, and 36 electrons?

Element _____ Mass Number _____